Allied Telesyn

Simply Connecting the World

AT-MC104XL
AT-MC104LH

Fast Ethernet Media Converters

Installation Guide

PN 613-10781-00 Rev C

Safety Warnings

Standards: This product meets the following standards

U.S. Federal Communications Commission
RADIATED ENERGY Note: This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Note: Modifications or changes not expressly approved of by the manufacturer or the FCC, can void your right to operate this equipment.

Industry Canada
This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

RFI Emission EN55022 Class A ☞ **1**

WARNING: In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures. ☞ **2**

Immunity EN50082-1 1997

Electrical Safety TUV-EN60950, UL1950, CSA 950

Laser EN60825

IMPORTANT: Appendix A contains translated safety statements for installing this equipment. When you see the ☞, go to Appendix A for the translated safety statement in your language.

WICHTIG: Anhang A enthält übersetzte Sicherheitshinweise für die Installation dieses Geräts. Wenn Sie ☞ sehen, schlagen Sie in Anhang A den übersetzten Sicherheitshinweis in Ihrer Sprache nach.

VIGTIGT: Tillæg A indeholder oversatte sikkerhedsadvarsler, der vedrører installation af dette udstyr. Når De ser symbolet ☞, skal De slå op i tillæg A og finde de oversatte sikkerhedsadvarsler i Deres eget sprog.

BELANGRIJK: Appendix A bevat vertaalde veiligheidsopmerkingen voor het installeren van deze apparatuur. Wanneer u de ☞ ziet, raadpleeg Appendix A voor vertaalde veiligheidsinstructies in uw taal.

IMPORTANT: L'annexe A contient les instructions de sécurité relatives à l'installation de cet équipement. Lorsque vous voyez le symbole ☞, reportez-vous à l'annexe A pour consulter la traduction de ces instructions dans votre langue.

TÄRKEÄÄ: Liite A sisältää tämän laitteen asentamiseen liittyvät käännetyt turvaohjeet. Kun näet ☞-symbolin, katso käännettyä turvaohjetta liitteestä A.

IMPORTANTE: l'Appendice A contiene avvisi di sicurezza tradotti per l'installazione di questa apparecchiatura. Il simbolo ☞, indica di consultare l'Appendice A per l'avviso di sicurezza nella propria lingua.

VIKTIG: Tillegg A inneholder oversatt sikkerhetsinformasjon for installering av dette utstyret. Når du ser ☞, åpner du til Tillegg A for å finne den oversatte sikkerhetsinformasjonen på ønsket språk.

IMPORTANTE: O Anexo A contém advertências de segurança traduzidas para instalar este equipamento. Quando vir o símbolo ☞, leia a advertência de segurança traduzida no seu idioma no Anexo A.

IMPORTANTE: El Apéndice A contiene mensajes de seguridad traducidos para la instalación de este equipo. Cuando vea el símbolo ☞, vaya al Apéndice A para ver el mensaje de seguridad traducido a su idioma.

OBS! Bilaga A innehåller översatta säkerhetsmeddelanden avseende installationen av denna utrustning. När du ser ☞, skall du gå till Bilaga A för att läsa det översatta säkerhetsmeddelandet på ditt språk.

Table of Contents

AT-MC104XL and AT-MC104LH Media Converters

The AT-MC104XL and AT-MC104LH (Long Haul) are 100Base-FX media converters that convert 100Base-FX multimode (MMF) to 100Base-FX single mode (SMF). The converters feature SC connectors and come with an external 12 V DC power adapter to supply power. See Figure 1 and Figure 2.

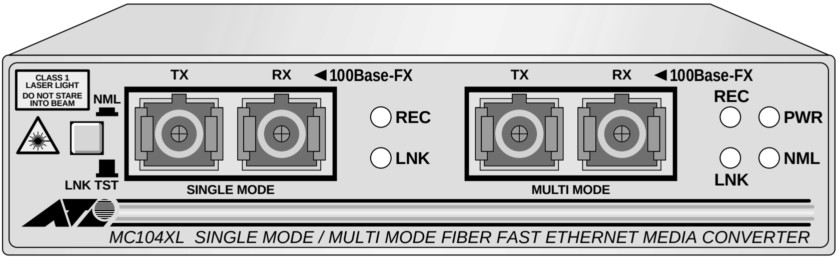


Figure 1 AT-MC104XL Media Converter

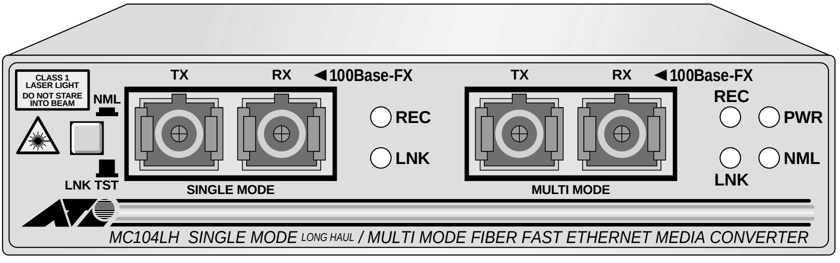


Figure 2 AT-MC104LH Media Converter

Key Features

The converters have the following key features:

- LEDs for unit and port status
- NML/LNK TST (Normal/Link Test) switch
- Full duplex transparent operation
- MissingLink™ feature provides link fault detection on the 100Base-FX segments
- Low power consumption
- Minimal delay for optimum performance
- Fast data conversion
- Polyswitched fuse protection
- External AC-DC Power Adapter
- Standard size for use with AT-MCR12 rack-mount chassis.

Note

For definitions of technical terms associated with Allied Telesyn products, refer to the Glossary on the Allied Telesyn website at **www.alliedtelesyn.com**.

LEDs

The status LEDs link (LNK) and receive (REC) are located next to each FX port. There is also a Normal (NML) LED and a power (PWR) LED. All LEDs are located on the front panel.

Table 1 LEDs

LED	State	Color	Description
PWR	ON	Green	Power is applied.
NML	ON OFF	Green	Unit is operating in normal mode. Unit is in Link Test mode.
REC	ON	Green	Data is being received on the port.
LNK	ON	Green	Link is established on the port

NML/LNK TST Switch

The NML/LNK TST (Normal/Link Test) switch, located on the front panel, establishes a fiber/fiber link in the test position.

The default position of the switch is IN, which is the normal (NML) operating mode and enables the MissingLink™ feature. With the switch in the OUT or Link Test mode (LNK TST) position, the MissingLink feature is disabled and the optical transmitter TX is forced on. The NML LED lights when the NML/TST LNK switch is in the default (IN) operating position.

Note

Using the Link Test mode does not interfere with a media converter's ability to pass network traffic.

MissingLink™

MissingLink gives the host (router, server, switch) attached to each end of the converter critical information about the status of the other (remote) segment link. If either link fails, the converter interacts with both hosts, making each instantly aware of the link fault. Either host can then execute preprogrammed, redundant transmission path selection.

External AC-DC Power Adapter

The power adapter supplies 12 volts DC to the media converter. Allied Telesyn supplies an approved safety compliant AC power adapter for the 120 and 240 V AC versions with an unregulated output of 12 VDC at 1A.

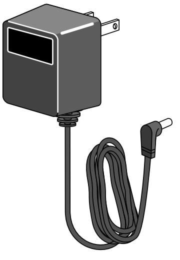


Figure 3 External AC-DC Power Adapter (North American version)

Package Contents

- ❑ AT-MC104XL or AT-MC104LH Media Converter
- ❑ Four Protective Feet (for standalone use only)
- ❑ External AC-DC power Adapter
- ❑ This Installation Guide
- ❑ Warranty Card

Contact your sales representative if any items are missing or damaged.

Installing the Media Converter as a Standalone

Warning

Do not stare into the laser beam when installing the media converters.
☞ **4**
LIGHTNING DANGER: DO NOT WORK on equipment or CABLES during periods of LIGHTNING ACTIVITY☞ **5**
DO NOT BLOCK AIR VENTS ☞ **6**

The following steps are for a standalone installation. For information concerning how to install a media converter in a rack-mount chassis, see “Rack-mount Chassis Installation” on page 6

1. Remove all equipment from the package and store the packaging in a safe place

2. Attach the four rubber feet to the base of the unit, placing one rubber foot in each corner. For rack-mount installation, do not attach the four rubber feet.

3. Plug the AC-DC power adapter into an appropriate AC power outlet and inset the power plug into the DC receptacle located on the rear panel.

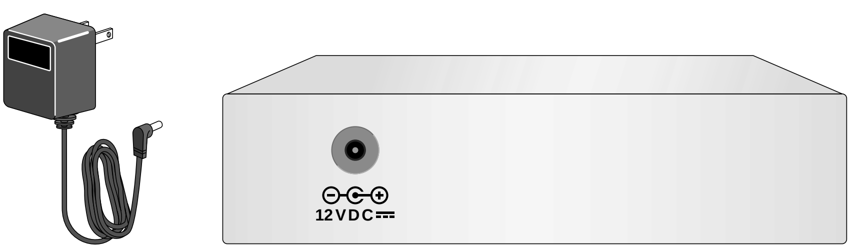


Figure 4 12V DC Connector on Rear Panel with External Power Adapter

4. Verify that the PWR LED lights green.
5. Set the NML/LNK TST switch to LNK TST (OUT position).
6. Remove the dust cap from the fiber optic connectors.
7. Plug the SMF cable into the connector. See Table 3 on page 9 for cabling specifications.

Note

End stations used with the media converter must operate in the same duplex mode (either both full-duplex or both half-duplex).

8. Connect the other end of the fiber cable to the desired end station. Verify that the LNK LED is ON.
9. Repeat steps 6 through 8 for MMF.

Back-to-Back Installation

Make sure you understand the following when doing a back-to-back installation.

- ❑ During installation, setup, and testing of back-to-back media converters, make sure each media converter is in the Link Test mode.
- ❑ When two media converters are connected back-to-back over single mode fiber with no multimode cables connected, and when the NML/LNK TST switch is in the OUT position (Link Test mode), the single mode fiber REC LEDs on each converter might flash. This is normal and will not affect the normal operation of the converters.
- ❑ When operating two media converters in a back-to-back configuration, Allied Telesyn recommends that the MissingLink feature on one or both of the converters be disabled. The MissingLink feature can be disabled by placing the NML/LNK TST switch in the OUT position (LNK TST Mode). Disabling the Link Test mode does not interfere with the converter’s ability to pass network traffic.

Rack-mount Chassis Installation

To install the media converter in the rack-mount, refer to the “AT-MCR12 Media Converter Chassis Installation Manual” or visit the Technical Support area of the Allied Telesyn website at **www.alliedtelesyn.com**. Figure 5 shows the AT-MCR12 rack-mount chassis.

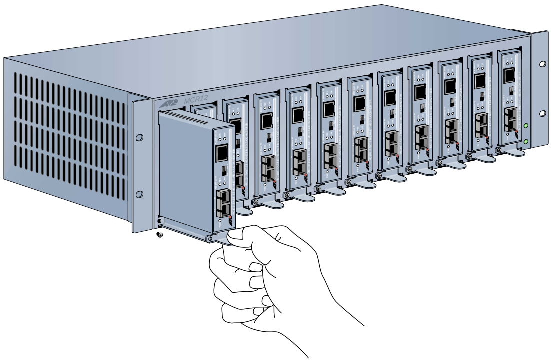


Figure 5 AT-MCR12 Rack-mount Chassis

Configurations

Figure 6 shows two typical network configurations of the AT-MC104XL Media Converter.

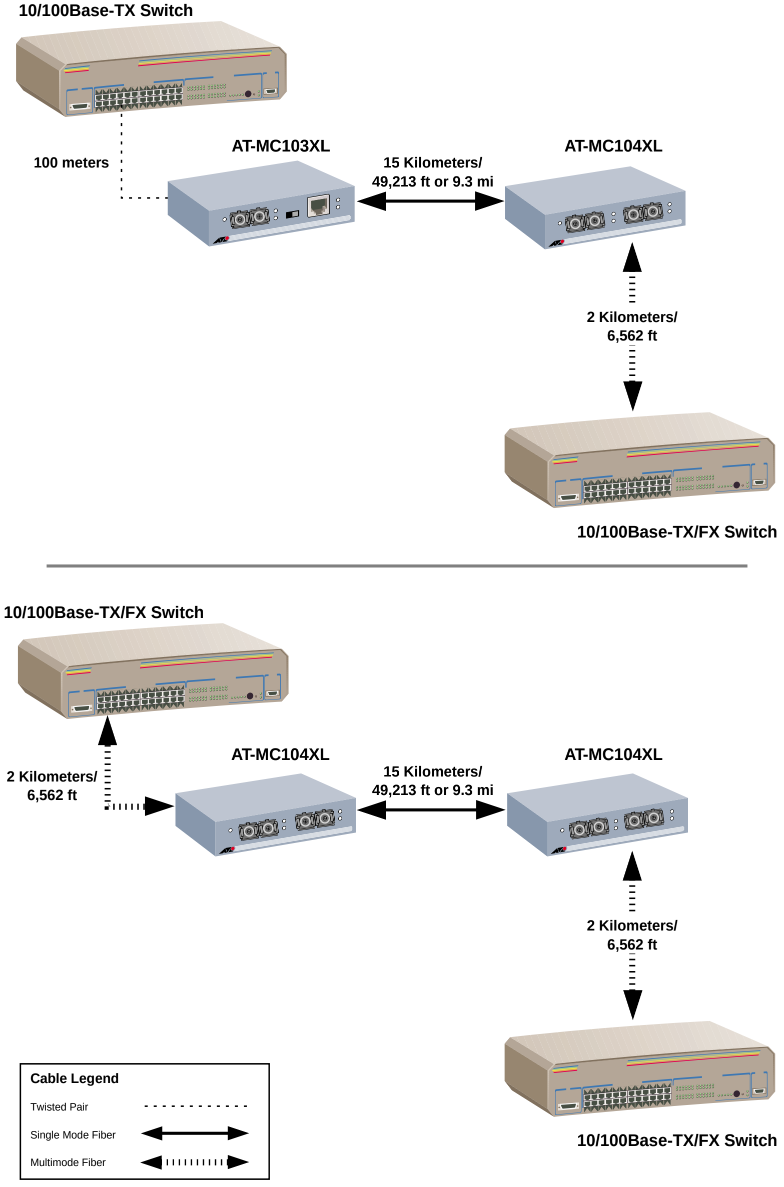


Figure 6 Typical Configurations

Troubleshooting

To troubleshoot your media converter, perform the following:

1. Set the unit in the Link Test mode.
2. End stations used with the media converter must operate in the same duplex mode (either both full-duplex or both half-duplex).
3. Verify that proper fiber cable is being used (See Table 3 on page 9).
4. Verify that the near end node transmitter (TX) is connected to the far end node receiver (RX) and vice versa on each fiber segment.

Technical Specifications

Table 2 lists the media converter technical specifications.

Table 2 Technical Specifications for AT-MC104XL and AT-MC104LH

Specifications	
Dimensions	10.5 cm W x 9.5 cm D x 2.5 cm H (4.125 in x 3.75 in D x 1.0 in H)
Max. Operating Temperature	0° C to 40 ^{o} C (32° F to 104° F)
Max. Storage Temperature	-20° C to 80° C (-4° F to 176° F)
Operating altitude	up to 3,048 m (10,000 ft)
Humidity	5% to 80% (non-condensing)
EMI/RFI	meets FCC Class A, EN55022 Class A
Safety	EN60950, UL 1950, CSA 950 EN60825
Immunity	EN50082-1 1997 Immunity Standard
Power: Input supply voltage Max. current Power consumption	 12 V DC +/-5% 500 mA 6W

Recommended Cables and Cable Specifications

Table 3 lists the IEEE 802.3u cabling specifications. Refer to this table for cabling recommendations.

Table 3 IEEE 802.3u Cabling Specifications for AT-MC104XL and AT-MC104LH

	100Base-FX
Media	1310 nm Multimode fiber (MMF), 50/125 micron 1310 nm Multimode fiber (MMF), 62.5/125 micron 1310 nm Single mode fiber (SMF), 9/125 micron (see Note 1)
Topology	Star, Tree
External Devices	Network Adapter Card, Repeater, Switch, Router, or Bridge
Maximum Segment Length	100Base-FX Full-Duplex operation: Multimode fiber (MMF), 2 km (1.2 mi) Single mode fiber (SMF), 15 km (9.32 mi) (XL model only, see Note 3) Single mode fiber (SMF), 40 km (24.9 mi) (LH model only, see Note 4) 100Base-FX Half-Duplex operation: The total distance of all fiber runs cannot exceed the following limits (see Note 2): with **one Media Converter** inline: Switch to Switch = 372 m (1221 ft) Work Station to Switch = 372 m (1221 ft) Switch to Class II Repeater = 185 m (607 ft) Switch to Class I Repeater = 137 m (450 ft) with **two Media Converters** inline: Switch to Switch = 332 m (1089 ft) Work Station to Switch = 332 m (1089 ft) Switch to Class II Repeater =145 m (476 ft) Switch to Class I Repeater = 97 m (318 ft)

Note 1. The Single Mode Fiber Optic Transmitter is rated as a Class 1 Laser.
Note 2. Each Media Converter used inline within a single collision domain will reduce the overall segment length by 40 m (131.24 ft) of fiber.
Note 3. Applies only to the AT-MC104XL, Single Mode Fiber Optic Transmitter/Receiver.
Note 4. Applies only to the AT-MC104LH, Single Mode Fiber Optic Transmitter/Receiver.

Technical Support and Service

You can contact the dealer where you purchased your product for local assistance. If local help is unable to resolve your problem, Allied Telesyn offers technical support via fax or telephone.

Refer to Appendix D, for technical support telephone and fax numbers or **www.alliedtelesyn.com** for current world-wide office locations.

Warranty

The AT-MC104XL and AT-MC104LH media converters have a lifetime warranty. The power adapter has a one year warranty.

Appendix A

Electrical Safety and Installation Requirements

STANDARDS: This product meets the following standards

U.S. Federal Communications Commission
RADIATED ENERGY Note: This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with this instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Note: Modifications or changes not expressly approved of by the manufacturer or the FCC, can void your right to operate this equipment.

Industry Canada
This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations. Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

STANDARDS: This product meets the following standards

1 **RFI Emission** EN55022 Class A

2 **WARNING**: In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

3 **Immunity** EN50082-1 1997

Electrical Safety TUV-EN60950, UL1950, CSA 950

Laser EN60825

Warning Class 1 Laser product.

4 **Warning** Do not stare into the Laser beam.

At time of installation, the Fiber Optic Lasers comply with FDA Radiation Performance Standard 21CFR Subchapter J, applicable at date of manufacture. Use of controls or adjustments of performance or procedures other than those specified herein may result in hazardous radiation exposure.

SAFETY

5 **LIGHTNING DANGER**
DANGER: DO NOT WORK on equipment or CABLES during periods of LIGHTNING ACTIVITY.

6 DO NOT BLOCK AIR VENTS

Power to the hub must be sourced only from the adapter.

USA/CANADA
Use a UL Listed/CSA Certified AC adapter of DC 12V, 500mA.

EUROPE - EU
Use TÜV licensed AC adapter of DC 12V, 500mA.

UK
Use a UK Safety Approved AC adapter of DC 12V, minimum 500mA.

OPERATING TEMPERATURE
This product is designed for a maximum ambient temperature of 40 degrees C.

ALL COUNTRIES: Install product in accordance with local and National Electrical Codes.

NORMEN: Dieses Produkt erfüllt die Anforderungen der nachfolgenden Normen.

1 **Hochfrequenzstörung** EN55022 Klasse A

2 **WARNUNG**: Bei Verwendung zu Hause kann dieses Produkt Funkstörungen hervorrufen. In diesem Fall müßte der Anwender angemessene Gegenmaßnahmen ergreifen.

3 **Störsicherheit** EN50082-1 1997

Elektrische Sicherheit TUV-EN60950, UL1950, CSA 950

Laser EN60825

Warnung Laserprodukt der Klasse 1.

4 **Warnung** Nicht direkt in den Strahl blicken.

SICHERHEIT

5 **GEFAHR DURCH BLITZSCHLAG**
GEFAHR: Keine Arbeiten am Gerät oder an den Kabeln während eines Gewitters ausführen

6 ENTLÜFTUNGSÖFFNUNGEN NICHT VERSPERREN

Der Buchse darf nur aus dem Adapter Strom zugeführt werden.

EUROPE - EU
Gebrauchen Sie einen von TÜV zugelassenen Wechselstromadapter für Gleichstrom 12 V, 500 mA.

BETRIEBSTEMPERATUR
Dieses Produkt wurde für den Betrieb in einer Umgebungstemperatur von nicht mehr als 40° C entworfen.

ALLE LÄNDER: Installation muß örtlichen und nationalen elektrischen Vorschriften entsprechen.

STANDARDER: Dette produkt tilfredsstiller de følgende standarder.

1 **Radiofrekvens forstyrrelsesemission** EN55022 Klasse A

2 **ADVARSEL**: I et hjemligt miljø kunne dette produkt forårsage radio forstyrrelse. Bliver det tilfældet, påkræves brugeren muligvis at tage tilstrækkelige foranstaltninger.

3 **Immunitet** EN50082-1 1997

Elektrisk sikkerhed TUV-EN60950, UL1950, CSA 950

Laser EN60825

Advarsel Laserprodukt av klasse 1.

4 **Advarsel** Stirr ikke på strålen.

SIKKERHED

5 **FARE UNDER UVEJR**
FARE: UNDLAD at arbejde på udstyr eller KABLER i perioder med LYNAKTIVITET.

6 VENTILATIONSÅBNINGERNE MÅ IKKE BLOKERES

Strømforsyningen til apparatet må udelukkende tages fra tilpasningstransformatoren.

EUROPE - EU
Brug kun TÜV godkendt vekselstrømstransformator på 12 V jævnstrøm, 500 mA.

BETJENINGSTEMPERATUR
Dette apparat er konstrueret til en omgivende temperatur på maksimum 40 grader C.

ALLE LANDE: Installation af produktet skal ske i overensstemmelse med lokal og national lovgivning for elektriske installationer.

EISEN: Dit product voldoet aan de volgende eisen.

1 **RFI Emissie** EN55022 Klasse A

2 **WAARSCHUWING**: Binnenshuis kan dit product radiostoring veroorzaken, in welk geval de gebruiker verplicht kan worden om gepaste maatregelen te nemen.

3 **Immuniteit** EN50082-1 1997

Electrische Veiligheid TUV-EN60950, UL1950, CSA 950

Laser EN60825

Waarshuwing Klasse-1 laser produkt.

4 **Waarchuwing** Neit in de straal staren.

VEILIGHEID

5 **GEVAAR VOOR BLIKSEMINSLAG**
GEVAAR: NIET aan toestellen of KABELS WERKEN bij BLIKSEM.

6 VENTILATIEGATEN NIET BLOKKEREN

Stroom mag alleen via de adapter naar het apparaat toegevoerd worden.

EUROPE - EU
Gebruik een door TÜV gekeurde wisselstroomadapter van 12 Volt gelijkstroom, 500 milliampères.

BEDRIJFSTEMPERATUUR
De omgevingstemperatuur voor dit produkt mag niet meer bedragen dan 40 graden Celsius.

ALLE LANDEN: het toestel installeren overeenkomstig de lokale en nationale elektrische voorschriften.

NORMES: ce produit est conforme aux normes de suivantes :

1 **Emission d'interférences radioélectriques** EN55022 Classe A

2 **MISE EN GARDE**: dans un environnement domestique, ce produit peut provoquer des interférences radioélectriques. Auquel cas, l'utilisateur devra prendre les mesures adéquates.

3 **Immunité** EN50082 - 1 1997

Sécurité électrique TUV-EN60950, UL1950, CSA 950

Laser EN60825

Attention Producit laser di classe 1.

4 **Attention** Ne pas fixer le faisceau des yeux.

SÉCURITÉ

5 **DANGER DE FOUDRE**
DANGER: NE PAS MANIER le matériel ou les CÂBLES lors d'activité orageuse.

6 NE PAS BLOQUER LES FENTES D'AÉRATION

L'alimentation du concentrateur doit être uniquement fournie par l'adaptateur.

EUROPE - EU
Utiliser un adaptateur secteur conforme TÜV de 12 V, 500 mA en courant continu.

TEMPÉRATURE DE FONCTIONNEMENT
Ce matériel est capable de tolérer une température ambiante maximum de 40 degrés Celsius.

POUR TOUS PAYS: Installer le matériel conformément aux normes électriques nationales et locales.

STANDARDIT: Tämä tuote on seuraavien standardien mukainen.

☞ 1 **Radioaaltojen häirintä** EN55022 Luokka A

☞ 2 **VAROITUS**: Kotiolosuhteissa tämä laite voi aiheuttaa radioaaltojen häiröitä, missä tapauksessa laitteen käyttäjän on mahdollisesti ryhdyttävä tarpeellisiin toimenpiteisiin.

☞ 3 **Kestävyys** EN50082-1 1997

Sähköturvallisuus TUV-EN60950, UL1950, CSA 950

Laser EN60825

Varoitus Luokan 1 Lasertuote.

☞ 4 **Variotus** Älä katso säteeseen.

TURVALLISUUS

☞ 5 **SALAMANISKUVAARA**
ENGENVAARA: ÄLÄ TYÖSKENTELE laitteiden tai KAAPELEIDEN KANSSA SALAMOINNIN AIKANA.

☞ 6 ÄLÄ TUKI ILMAREIKIÄ

Tähtipisteeseen (hub) syötettävän virran pitää tulla ainoastaan sovittimesta.

EUROPE - EU
Käytä TÜV-lisenssillä valmistettua verkkosovitinta, jonka tasajännitteen nimellisarvot ovat DC 12 V, 500 mA (milliampeeria).

KÄYTTÖLÄMPÖTILA
Tämä tuote on suunniteltu ympäröivän ilman maksimilämpötilalle 40° C.

KAIKKI MAAT: Asenna tuote paikallisten ja kansallisten sähköturvallisuusmääräysten mukaisesti.

STANDARD: Questo prodotto è conforme ai seguenti standard.

☞ 1 **Emissione RFI (interferenza di radiofrequenza)** EN55022 Classe A

☞ 2 **AVVERTENZA**: in ambiente domestico questo prodotto potrebbe causare radio interferenza. In questo caso potrebbe richiedersi all'utente di prendere gli adeguati provvedimenti.

☞ 3 **Immunità** EN50082-1 1997

Sicurezza elettrica TUV-EN60950, UL1950, CSA 950

Laser EN60825

Avvertenza Prodotto laser di Classe 1.

☞ 4 **Avertenza** Non fissare il raggio con gli occhi.

NORME DI SICUREZZA

☞ 5 **PERICOLO DI FULMINI**
PERICOLO: NON LAVORARE sul dispositivo o sui CAVI durante PRECIPITAZIONI TEMPORALESCHE.

☞ 6 NON OSTRUIRE LE PRESE D'ARIA

Questo dispositivo deve essere alimentato solo mediante l'adattatore.

EUROPE - EU
Utilizzare l'adattatore per c.a. da 12 V c.c. e 500 mA conforme alla normativa TÜV.

TEMPERATURA DI FUNZIONAMENTO
Questo prodotto è concepito per una temperatura ambientale massima di 40 gradi centigradi.

TUTTI I PAESI: installare il prodotto in conformità delle vigenti normative elettriche nazionali.

SIKKERHETSNORMER: Dette produktet tilfredsstiller følgende sikkerhetsnormer.

1 **RFI stråling** EN55022 Klasse A

2 **ADVARSEL**: Hvis dette produktet benyttes til privat bruk, kan produktet forårsake radioforstyrrelse. Hvis dette skjer, må brukeren ta de nødvendige forholdsregler.

3 **Immunitet** EN50082-1 1997

Elektrisk sikkerhet TUV-EN60950, UL1950, CSA 950

Laser EN60825

ADVARSEL Laserprodukt av klasse 1.

4 **ADVARSAL** Stirr ikke på strålen.

SIKKERHET

5 **FARE FOR LYNNEDSLAG**
FARE: ARBEID IKKE på utstyr eller KABLER i TORDENVÆR.

6 BLOKKER IKKE LUFTVENTILENE

All strømtilførsel må komme fra adapteren.

EUROPE - EU
Benytt TÜV-godkjent AC-adapter på 12V DC, 500mA (millismpere)

DRIFTSTEMPERATUR
Dette produktet er konstruert for bruk i maksimum romtemperatur på 40 grader celsius.

ALLE LAND: Produktet må installeres i samsvar med de lokale og nasjonale elektriske koder.

PADRÕES: Este produto atende aos seguintes padrões.

1 **Emissão De Interferência De Radiofrequência** EN55022 Classe A

2 **AVISO**: Num ambiente doméstico este produto pode causar interferência na radiorrecepção e, neste caso, pode ser necessário que o utente tome as medidas adequadas.

3 **Imunidade** EN50082-1 1997

Segurança Eléctrica TUV-EN60950, UL1950, CSA 950

Laser EN60825

Aviso Produto laser de classe 1.

4 **Aviso** Não olhe fixamente para o raio.

SEGURANÇA

5 **PERIGO DE CHOQUE CAUSADO POR RAIO**
PERIGO: NÃO TRABALHE no equipamento ou nos CABOS durante períodos suscetíveis a QUEDAS DE RAIO.

6 NÃO BLOQUEIE AS ABERTURAS DE VENTILAÇÃO

Use somente o adaptador fornecido para alimentação elétrica do hub.

EUROPE - EU
Use um adaptador de corrente alternada com saída DC de 12V e 500mA em conformidade com as especificações da TÜV.

TEMPERATURA DE FUNCIONAMENTO
Este produto foi projetado para uma temperatura ambiente máxima de 40 graus centígrados.

TODOS OS PAÍSES: Instale o produto de acordo com as normas nacionais e locais para instalações elétricas.

ESTÁNDARES: Este producto cumple con los siguientes estándares.

1 **Emisión RFI** EN55022 Clase A

2 **ADVERTENCIA**: en un entorno doméstico, este producto puede causar radiointerferencias, en cuyo caso, puede requerirse del usuario que tome las medidas que sean convenientes al respecto.

3 **Inmunidad** EN50082-1 1997

Seguridad eléctrica TUV-EN60950, UL1950, CSA 950

Laser EN60825

¡ADVERTENCIA! Producto láser Clase 1.

4 **¡ADVERTENCIA!** No mirat fijamente el haz.

SEGURIDAD

5 **PELIGRO DE RAYOS**
ELIGRO: NO REALICE NINGUN TIPO DE TRABAJO O CONEXION en los equipos o en LOS CABLES durante TORMENTAS ELECTRICAS.

6 NO BLOQUEE LAS ABERTURAS PARA VENTILACION

La energía para el dispositivo central o "hub" debe provenir únicamente del adaptador.

<u>EUROPE - EU</u>
Utilizar un adaptador de corriente alterna autorizado TÜV de 12 voltios de corriente continua y 500 miliamperios.

TEMPERATURA REQUERIDA PARA LA OPERACIÓN
Este producto está diseñado para una temperatura ambiental máxima de 40 grados C.

PARA TODOS LOS PAÍSES: Monte el producto de acuerdo con los Códigos Eléctricos locales y nacionales.

STANDARDER: Denna produkt uppfyller följande standarder.

1 **Radiostörning** EN55022 Klass A

2 **VARNING**: Denna produkt kan ge upphov till radiostörningar i hemmet, vilket kan tvinga användaren till att vidtaga erforderliga åtgärder.

3 **Immunitet** EN50082-1 1997

Elsäkerhet TUV-EN60950, UL1950, CSA 950

Laser EN60825

VARNING! Laserprodukt av klass 1.

5 **VARNING!** Laserstrålning när enheten är öppen.

SÄKERHET

6 **FARA FÖR BLIXTNEDSLAG**
FARA: ARBETA EJ på utrustningen eller kablarna vid ÅSKVÄDER.

7 BLOCKERA INTE LUFTVENTILERNA

Endast anslutningsenheten får vara kraftkälla till centralen.

<u>EUROPE - EU</u>
Använd en växelströmsanslutningsenhet licensierad av TÜV. Likström 12V, 500mA.

DRIFTSTEMPERATUR
Denna produkt är konstruerad för rumstemperatur ej överstigande 40 grader Celsius.

ALLA LÄNDER: Installera produkten i enlighet med lokala och statliga bestämmelser för elektrisk utrustning.

Appendix B

AT-MC104XL and AT-MC104LH Installation Guide Feedback

Please tell us what additional information you would like to see discussed in this guide. If there are topics you would like information on that were not covered in this guide, please photocopy this page, answer the questions and fax or mail this form back to Allied Telesyn. The mailing address and fax number are at the bottom of the page. Your comments are valuable when we plan future revisions of this guide.

I found the following the most valuable ______________________________

____

____

____

I would like the following more developed _____________________________

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____

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I would find this guide more useful if ________________________________

____

____

____

Please fax or mail your feedback. Fax to 1-408-736-0100. Or mail to:
Allied Telesyn International, Corp.
c/o Technical Communications
960 Stewart Drive, Suite B
Sunnyvale, CA 94086 USA

PN 613-10781-00 Rev C

Appendix C

Technical Support Fax Order

Name ____

Company ____

Address ____

City ______________________ State/Province ______________________________

Zip/Postal Code ________________ Country ______________________________

Phone ______________________________ Fax ______________________________

Incident Summary

Model number of Allied Telesyn product I am using ______________________

Firmware release number of Allied Telesyn product ______________________

Other network software products I am using (e.g., network managers)

____

____

Brief summary of problem ____

____

Conditions (List the steps that led up to the problem.) ____________________

____

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Detailed description (Please use separate sheet)

Please also fax printouts of relevant files such as batch files and configuration files. When completed, fax this sheet to the appropriate Allied Telesyn office. Fax numbers can be found on page 21.

Appendix D

Where To Find Us

For Technical Support or Service		
Location	**Phone**	**Fax**
Americas United States, Canada, Mexico, Central America, South America	1 (800) 428-4835	1 (503) 639-3946
Asia Singapore, Taiwan, Thailand, Malaysia, Indonesia, Korea, Philippines, China, India, Hong Kong	(+65) 3815-612	(+65) 3833-830
Australia Australia, New Zealand	1 (800) 000-880	(+61) 2-9438-4966
France France, Belgium, Luxembourg, The Netherlands, Middle East, Africa	(+33) 1-60-92-15-25	(+33) 1-69-28-37-49
Germany Germany, Switzerland, Austria, Eastern Europe	(+49) 30-435-900-126	(+49) 30-435-70-650
Italy Italy, Spain, Portugal, Greece, Turkey, Israel	(+39) 02-416047	(+39) 02-419282
Japan	(+81) 3-3443-5640	(+81) 3-3443-2443
United Kingdom United Kingdom, Denmark, Norway, Sweden, Finland, Iceland	(+44) 1-235-442560	(+44) 1-235-442680
Technical Support Address	TS1@alliedtelesyn.com	
FTP Server	Address: gateway.centre.com [lowercase letters] Login: anonymous [lowercase letters] Password: your e-mail address [requested by the server at login]	

For Information Regarding Allied Telesyn International, Corp.	
Allied Telesyn International, Corp. 19800 North Creek Parkway, Suite 200 Bothell, WA 98011 Tel: 1 (425) 487-8880 Fax: 1 (425) 489-9191	**Allied Telesyn International, Corp.** 960 Stewart Drive, Suite B Sunnyvale, CA 94086 Tel: 1 (800) 424-4284 (USA and Canada) Fax: 1 (408) 736-0100
World Wide Web	http://www.alliedtelesyn.com